Office of Science Annual Laboratory Planning Process

Background.

The Department of Energy (DOE) Office of Science (SC) is responsible for the effective stewardship of ten Federally Funded Research and Development Centers (FFRDCs), otherwise called "national laboratories," which are operated by non-Federal organizations under arrangements known as Management and Operating (M&O) contracts. Under SC's laboratory M&O contracts, contractors must develop and maintain plans for the laboratories that are consistent with the objectives of the DOE, SC and the laboratories' other program sponsors.

Congress emphasized the importance of planning for the future of the laboratories in a report accompanying the Fiscal Year (FY) 2006 Energy and Water Development Appropriations Bill, in which it required DOE to produce business plans for each of the national laboratories. While this requirement does not exist today, SC has acknowledged the importance and benefits of conducting a laboratory planning process on an annual basis as an element of its stewardship responsibility for these institutions.

Accordingly, SC engages its laboratories in an annual strategic planning activity that asks the laboratory leadership teams to define an exciting yet realistic long-term vision for the future of their respective laboratories. This information provides the basis for a discussion between the SC leadership and the laboratory about the laboratory's future directions, strengths and weaknesses, immediate and long-term challenges, and resource needs. The discussions are intended to: 1) develop an understanding of the current laboratory management's goals for the laboratory; 2) develop a shared understanding of how those goals fit with DOE/SC missions; 3) result in a written ten-year plan that reflects DOE/SC's view of the future of the laboratory; and 4) fulfill various DOE reporting requirements.

Discussion/Process.

Each winter, SC formulates planning guidance for its laboratories to use to develop the strategic ten-year plans. These plans consist of the following sections:

1. *Mission/Overview*: This section, which is for a public audience, comprises a top-level summary of the laboratory that covers everything from the history and location of the laboratory, to a list of its current core capabilities and a profile of its staff.

2. *Lab-at-a-Glance*: This section, which is intended for a public audience, outlines the laboratory's major sources of funding and overall costs of operation and provides a snapshot of the laboratory's human capital assets.

3. *Current Laboratory Core Capabilities*: SC has identified seventeen categories of core capabilities that comprise the scientific and technological foundation of its national laboratories and has identified the existence of these capabilities across the SC complex. SC uses three criteria to define core capabilities. They must: 1) encompass a substantial combination of facilities and/or teams of people and/or equipment; 2) have a unique and/or world-leading component; and 3) be relevant to a discussion of the missions of the

DOE, National Nuclear Security Administration, (NNSA), and the Department of Homeland Security (DHS) missions.[1]

This section, which is intended for a public audience, provides an overview of a laboratory's current core capabilities. These descriptions are intended to articulate the niche that each laboratory holds in the SC complex relative to the other SC laboratories so as to easily distinguish these institutions from one another.

4. *Science Strategy for the Future/Major Initiatives*: This section provides the basis for an in-depth discussion between the laboratory and the SC leadership about the laboratory's vision for the future. This discussion occurs in the context of a complete vision for a healthy, world-class laboratory and the resource needs and risks associated with accomplishing that vision. With the exception of a two-paragraph summary, this section is for internal use only.

5. *Work for Others (WFO)*: This section, which is for internal use only, asks the laboratories to communicate their overall strategy and vision for the WFO program at the laboratory and to articulate how WFO activities contribute to and strengthen the laboratory's core capabilities and ability to deliver the DOE mission. As an appendix to the laboratory plan, SC also asks the laboratories to provide descriptions of their ongoing WFO activities and a WFO funding level ceiling request for the next fiscal year.

6. *Infrastructure/Mission Readiness*: This section ties mission readiness to laboratory facilities and infrastructure by identifying gaps and plans to fill those gaps. It also serves as SC's equivalent of the Ten Year Site Plan required by DOE Order 430.2b. This section, with the exception of a description on site sustainability, is intended for a public audience.

7. *Human Resources*: This section, which is for internal use only, requests the information needed to elucidate the laboratory's perspective on the gap between its current human capital and an optimal one, the obstacles it is encountering with respect to developing a mission-ready workforce, and the actions it is taking to address these obstacles.

8. *Cost of Doing Business*: This section, for internal use only, allows the laboratory to identify major cost drivers and to discuss methods of mitigating those factors.

After the laboratories submit their plans, the SC leadership holds internal meetings to discuss their views on the submitted plans. SC then invites each laboratory leadership team to present its plan to the DOE in a formal briefing. The meetings facilitate discussion between entities with vested interests in the future of the laboratory: SC, NNSA, DHS, the DOE Offices of Energy Efficiency and Renewable Energy (EERE) and Nuclear Energy (NE), and laboratory leadership. These meetings are intended to provide laboratories with real-time feedback on their goals in the context of how their goals align with DOE/SC's plans for the future. Within two weeks of the briefing, each laboratory submits a "final" annual plan, the public portions of which are published on the DOE website.

[1] Order 484.1 was issued to establish Department of Energy (DOE) policies and procedures for the acceptance, performance, and administration of reimbursable work directly funded by the Department of Homeland Security (DHS).

Laboratory Planning Cycle